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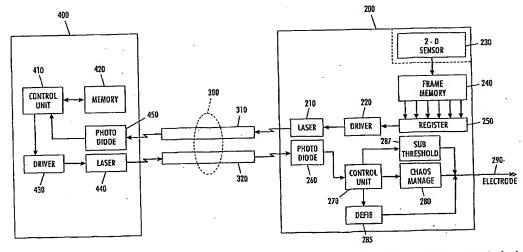
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as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii)) for the following designations AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM,

[Continued on next page]

(54) Title: FIBRILLATION/TACHYCARDIA MONITORING AND PREVENTIVE SYSTEM AND METHODOLOGY



(57) Abstract: A cardiac assist device senses conditions of a heart and controls the generation of various electrical stimuli in response to sense conditions of the heart. The cardiac assist device generates a electrical pulse so as to defibrillate a fibrillated heart when the cardiac assist device determines from the sensed conditions a state of fibrillation. The cardiac assist device generates a chaos control electrical signal so as to bring a pre-fibrillated heart condition back into a normal beating condition when the cardiac assist device determines from the sensed conditions a pre-state of fibrillation. Lastly, the cardiac assist device generates an electrical enhancement signal that causes a threshold of pacing cells in the heart to be exceeded in response to a subthreshold stimulus when the cardiac assist device determines from the sensed conditions a subthreshold pacing signal.

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